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ABSTRACT

Research in a Puerto Rican community in New York City was undertaken to explore the language climate in that community, which included the linguistic forms in use, their distribution and functions in daily life, community members' attitudes toward language, and the way in which language phenomena are influenced by various social factors. An ethnographic and sociolinguistic approach was used to investigate changes occuring in language as a result of English and Spanish influence and the phenomenon of linguistic convergence. It was concluded that linguistic transformations have occurred, but whether these can be described as assimilation or loss could not be ascertained. Results discredit the claim that Puerto Ricans are "alingual" or "semilingual" and suggest that Spanish and English are intact. Language choice is both Spanish and English, rather than one or the other. English, rather than being an indicator of assimilation, is seen as necessary for economic success but not antithetical to Puerto Rican culture. Proficiency in English is increasingly greater, but the community remains bilingual at this stage. The migration process tends to favor the maintenance and use of Spanish. These and other factors lead to competing tendencies within the bilingual nature of the community. (Author/MJL)

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CENTRO DE ESTUDIOS PUERTORRIQUENOS 445 W 59th St., New York, N.Y. 10019 Tel. (212) 489-5260

SOCIAL DIMENSIONS OF LANGUAGE
USE IN EAST HARLEM

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Language Policy Task Force

New York, April 1980

SOCIAL DIMENSIONS OF LANGUAGE USE IN EAST HARLEM

Language Policy Task Force[1]

Center for Puerto Rican Studies
City University of New York

1.0 Introduction

The process of cultural transformation is one that social scientists have attempted to examine and understand within the context of rapid social change resulting from colonial conquest, industrialization and modernization, economic exchange and interdependence, or mass migration. The latter situation, mass migration, has drawn much attention among American scholars because of the numbers and various types of ethnic communities established in the United States as a result of population movements from almost every part of the world. These movements have traditionally been viewed as key elements in the socio-economic and historical development of American society, e.g. the westward expansion and colonization in the 19th century, and industrialization and urbanization in the 20th century.

The initial migration and establishment of a Puerto Rican community in the continental United States after the turn of the present century, following the American occupation of Puerto Rico, the consequent modest, but continuous migration flow until World War II, and the massive movement after World War II including the current dispersal and circulation of Puerto Ricans to new regions of the United States, must also be analyzed in a similar manner. In particular, the evolution of the economic

and political relationship between Puerto Rico and the United States since the initial conquest is an essential part of history needed to explain the subsequent development of the Puerto Rican community within American society. It would seem from the history of that relationship (Centro de Estudios Puertorriqueños 1979) that unique politico-economic aspects of the Puerto Rican experience differentiate this community from other immigrant communities. Such knowledge is crucial to the understanding of the current situation with regard to the aspect of Puerto Rican social life we are concerned with here, language. Of particular concern, as it is an important indicator of ethnic group dissolution or survival, is the preservation of language. It is our hypothesis that the migration patterns which establish an ethnic or language minority community, together with social factors which affect the integration of that community into the wider society, are of paramount importance to understanding the phenomenon of language survival or decline. In the case of the Puerto Rican community, for example, the problem of racism would be one such factor affecting the integration of some members of this national minority into the mainstream of American life.

There are ethnic groups which established themselves in the United States during a single intensive period of migration, with or without some return movement, and which are integrated into the wider American society, with all its contradictions. Among the European immigrants who came during the 19th and early 20th century, for example, the

mother tongue has either been lost, is spoken mainly by the older generation, or is restricted to small sectors of the community, neighborhoods that still function as reception centers for new arrivals. Among other groups, such as the Mexican-Americans, the movement from the mother country has not stopped, and they still maintain the mother tongue (Macías ms.). Still others continue to speak the national language because the community consists mainly of recent arrivals, as is the case with some non-Puerto Rican Hispanic groups in New York City, like the Dominicans, as well as some Puerto Rican communities outside of New York City, as Poplack's work in Philadelphia (1979b) shows. Other language minority groups have maintained their native language through forced or voluntary social isolation, e.g. Native American and Amish communities.

The New York City Puerto Rican community is at present increasing in size primarily through reproductive growth as opposed to in-migration from Puerto Rico, which was not the case 30 years ago. However, there is still a constant flow of people from Puerto Rico to New York City due to the circulating character of the present migration, a pattern which results from the unique colonial relationship between the two countries. This, in addition to other factors, both internal and external to the community, may account for its present bilingual character. Among these are the size of the total Hispanic population of New York City, the possibility of acquiring literate skills in Spanish through certain bilingual programs, economic incentives, media support, and the relative

social isolation of some neighborhoods. (The aforementioned groups which lost their native tongue all made the transition to English by the third generation, in contrast to the Puerto Rican community we describe here.)

To fully comprehend the language situation in any speech community one must investigate the linguistic forms in use in the community (both as concerns the languages involved and any dialect variation that exists within them), their distribution and functions in daily life, and community members' attitudes toward the linguistic state of affairs. The description of these phenomena and the way in which they are influenced by the social factors mentioned above is the goal of this study.

Because the scope of such a study is beyond the concerns of a single discipline, any such undertaking has to be interdisciplinary by nature. This involves the use of various methods, e.g. ethnography, survey instruments and sociolinguistics, and the critical adaptation of concepts from various disciplines (e.g. the speech community, language variation, domains, attitudes, dominance, etc.). This allows us to develop a broader but concise picture of language as it is actually lived within this speech commuity, and achieve a better understanding of cultural change in process within its social context.

2.0 Research Design

2.1 The Sample

Our study site is in East Harlem, New York, a community that has been a working-class area of the city since the end of the 19th century.

At the turn of the century a small Puerto Rican community, largely composed of persons involved in the cigar and tobacco industry, settled around 110th Street and Lexington Avenue. By the early 1960's this community had expanded to include virtually all of East Harlem which is now the oldest continuous Puerto Rican settlement in the United States. The data we will report on here was collected from a neighborhood that has had Puerto Rican residents since the 1930's, but became predominantly Puerto Rican by the mid to late 1950's. The block we studied is now approximately 95 percent Puerto Rican. Several generations live in the community, making it an ideal site for our study. In this neighborhood it is possible to investigate language use and skills across generations, as well as issues related to language ideology within different sectors of the community. Here, too, we can investigate language shift in a setting which is favorable to Spanish maintenance in terms of size and ethnic density.

The Puerto Rican population in New York City is very young; 75 percent are under 44 years of age. About half were born in Puerto Rico; 85 percent are working class and live in the poorest sections of the city. The average Puerto Rican has about a 9th grade education.

The 500-600 residents of this neighborhood show similar characteristics. The block is mainly residential with very old housing (railroad apartments being the norm), and most breadwinners are employed in the service or manufacturing sector of the economy (as cooks, dishwashers, janitors, garment workers). Only the high concentration of Puerto Ricans is atypical, since in New York most Puerto Ricans reside in areas where they constitute a plurality rather than a majority of the population

2.2 Methods

The first step in our study was to gain an understanding of what daily life was like in our research site. We used the tradition and methods of urban ethnography as developed within the fields of sociology and anthropology. The type of ethnography we chose is based on the description of informal social organizations (networks) found in urban settings. Since network contact is the basis of everyday interaction, it was also a means for penetrating and analyzing the use of language in a systematic way.

Using this model, we observed language use broadly across all sectors of the population, and in detail from four: a male, a female, a mixed and an adolescent network. Generally, it was found that along with age and sex, a person's experience with the migration process ultimately defines his/her placement within the social organization of the community. Language use, skills, and ideology correlate well with everyday interaction patterns which are based on a shared socio-

historical process. That is, outside of family settings, members of the community mainly socialize with other individuals who share similar life experiences. In this community, differences among individuals with respect to place of birth, age of arrival, length of time in the United States, education, first language and second language, are closely related to the migration experience. For example, those who were raised in this country during a period when the community was growing almost totally from in-migration, implying contact mainly with Spanish monolingual migrants, also happen to be some of the most capable bilinguals. They also participate in common communication networks which are formed mainly through the sharing of leisure time activities. They are both tolerant of and adept at language mixing and are strong supporters of Spanish maintenance for the community.

Our observations took place over a three-year period which allowed us to view in an intimate way, through actual participation, the daily life, language skills and language choice of the population in a variety of settings and situations. Our shared ethnic identity helped to establish confidence and trust, which made our observations relatively unobtrusive and minimized the Labovian Observer's Paradox (i.e. how can we observe behavior as it might happen when we are not observing it?). This enabled us to collect and tape-record speech in a wide range of situations. The availability of this data base explains in part the divergence of some of these findings (cf. sections 5.2 and 5.3) from those of other similar studies.

The language attitude study described in section (4) is based on the responses of a sample drawn from all of the social networks we discovered. The linguistic data, whether formal or natural, is derived from the three adult networks we observed in greatest detail.

3.0 Ethnographic Observations of Language Use

The most important finding based on observation of the daily interactions of members in this community is that almost all have some degree of bilingual skills; at a minimum, only a passive knowledge of one of the two languages (Spanish for some of the adolescents, English for the older monolingual Spanish speakers), and at best almost complete command of both languages with control of dialects, registers and styles. Everyone had at least productive competence in Spanish phonology. For most of the community these are skills acquired outside of any formal means of education or language instruction.

Another observation relevant to the question of language maintenance and language shift is the fact that most younger Puerto Ricans of the third generation prefer English. There is some evidence that there is a life cycle factor involved; when adolescents enter into young adult roles they appear to speak more Spanish. This may not be sufficient to reverse the shift to English preference evident from this segment of the community, but could be instrumental in maintaining bilingualism.

In this community there are rules of etiquette which guide language choice in interaction, and such norms support the maintenance of Spanish. A Spanish-dominant or monolingual speaker is almost always accommodated, even among peers, but especially if he/she holds some status position, as is the case for older persons or women in conversation with men. In addition, because of the migration patterns still

prevailing between Puerto Rico and the United States, an individual never knows when he/she may have to communicate with a monolingual Spanish speaker recently arrived from the homeland; this type of situation can occur often.

One finding from our observations which does not favor the maintenance of Spanish is the fact that there are no strict rules for the use of Spanish and English in terms of social domains (here operationally defined as settings) which to some theorists are necessary for the survival of the subordinate language (Fishman 1971). There is no functional separation of the languages in any of the contexts observed. This is particularly evident in informal group settings where both languages are used extensively by the same speakers. In fact the alternate use of both languages in a conversation or even within the same stream of speech has been observed to be a norm of communication preferred by members of the community in situations (among others) where participants have varying linguistic abilities.

The social prominence of language mixing as a mode of communication in this community led us to investigate this phenomenon in greater depth (section 5.2). Our studies of Spanish were motivated by the need to investigate the extent of language loss and/or change due to constant contact with English. This is important because of the link between language and culture. The morphological, syntactic and semantic studies have corroborated the bilingual nature of the community postulated from observational data.

However, there are other observations, hypotheses and impressions which merit the same kind of follow-up investigation as those mentioned above. For example, at times one could not tell whether a person was speaking basically English or Spanish. This may be due to a combination of phonology or accent, speech intonation and rhythm, and of course, the fluid switching between two languages. Speech style is another area of variation in Spanish. It may involve differences in speed of delivery, the use of tu versus usted and phonological variation[2]. In English, stylistic range encompasses what for the mainstream society would be considered dialect variation, i.e., Black English, New York City English, and what might be called a Puerto Rican English. Sometimes this variation is only manifested through the insertion into English of an identifiable, or stereotyped dialect feature, but other speakers have a full dialect range and can actually code shift into a given dialect. (Accented English is not here considered a stylistic alternative, but an artifact of second language acquisition after maturity.)

This state of affairs, where in Spanish style shifting is marked by registers and in English by incorporating features from other social dialects, or even wholesale shifting into those dialects, can be understood as a reflection of the social history and conditions of this community. The results are the maintenance of the native forms of the national language and the adaptation of the superordinate language in a manner indicating the social position of the community in U.S. society.

The conceptions and values the community attaches to this situation will be discussed in the next section.

4.0 Language Attitudes

A language attitude survey was conducted through personal tape-recorded interviews using a questionnaire of over 175 items. The sample included 91 persons chosen as representative by Pedraza in the course of the ethnographic observation. This sample will be referred to as the Block. A second sample of 40 teachers and administrators (referred to hereafter as the Teachers) was randomly selected from personnel in the bilingual education program in District 4 (East Harlem).

The results of the Block sample will be the main focus here, but differences and similarities between the two samples are instructive in contextualizing and highlighting the attitudes of the Block sample about whom we have both ethnographic and sociolinguistic information.

Tables 1 and 2 in the Appendix provide a comparison between the two samples in terms of age, birthplace and one aspect of the migration experience (age of arrival to the United States). Two points to notice are first, the age differences between Block and Teachers sample: the Teachers are divided almost evenly between young and middle-aged adults. Second, although slightly more than half of both groups were born in Puerto Rico, when compared to the middle-aged Block residents, twice as many of the middle-aged Teachers were born in the United States.

In the Block sample, all age groups and persons of every type of language ability reported Puerto Rican tastes in food, music, friendships and other indicators of cultural solidarity (see 3 in the

Appendix). Connection to Puerto Rican family units and a sense of pride and emotional attachment to Puerto Rican identity are considered most important in the self-definition of culture.

4.1 Political/Cultural Report

Three sensitive areas considered briefly in the interview concern the cultural and political aspects of nationality. The questions were asked in the following order, with the rationale that the more vague should precede the most pointed:

> Do you consider yourself part of the United States, part of Puerto Rico or part of both?
>
> What is your nationality?
>
> What political status do you favor for Puerto Rico?

The answers are displayed comparatively in figures 4, 5 and 6 in the Appendix.

In the first question, as displayed in (4), it is evident that a majority of both the Block and Teacher samples chose both cultures rather than choose between them. Where the issue of reported nationality is declared (in 5), the aversion on the part of the Teachers to a hybridized ethnic-American category is clear. This 'Puerto Rican-American' ascription, however, is prefered by the largest sector of the Block population. The 'Nuyorican' ascription is much less attractive to the Teachers, and the 'American' nationality, though still small in representation, is proportionally greater among the Teachers. The majority of the Teachers name their nationality as 'Puerto Rican', and their political stance reflects their emphasis on autonomy (6). Far fewer Teachers prefer

the commonwealth status than do members of the Block, and far more would favor independence for Puerto Rico. The pro-statehood supporters are even fewer in the Teacher sample than among the Block sample, though in neither group is this a strong alternative.

Regarding the official language of Puerto Rico (the language of official business, the schools and government, see 7), no one said that it should be English, although a majority of the Block said that both English and Spanish should be officially endorsed. Some of the Teachers expressed their fear that official status for English would threaten to engulf Spanish, given the incursion of English into the media, advertising and business. Others mentioned the era of educational policy prior to 1944 when English was official, and voiced their opposition to the return of such policies.

About half of each sample said they feel more Puerto Rican speaking in a particular way (half said it made no difference). For some what made them feel Puerto Rican was speaking Spanish, and for others it was a matter of topics relating to the culture, such as talking about family, or about Puerto Rico or about language and identity.

Looking to the future generation in New York, a majority from the Block say they would prefer bilingualism for their children from the very outset of language acquisition, while among the Teachers there is a larger proportion of those who say they would prefer Spanish first (8).

The issue of who is responsible for helping to maintain Spanish seems more problematic than the parallel issue for English. In the schools, streets and on television, English is being reinforced. The issue with English, as we shall see, is not maintenance, but elaboration of literate skills and standard registers. With Spanish, both maintenance and elaboration require attention. Nearly half the Block (9) say that all sectors--home, school, church and political groups--should bear the responsibility of keeping Spanish skills alive. The Teachers, perhaps aware that formal instruction alone cannot maintain a language, and also recognizing the greater influence out-of-school activities have in the lives of children, place greatest emphasis on the family in keeping Spanish alive.

4.2 Language in Culture

As for language in Puerto Rican culture, while it is clear that no one feels that Spanish should disappear, and that wherever Puerto Rican culture exists, Spanish is its main language, five out of six on the Block said that Spanish is not necessary for Puerto Rican identity. (See 10 for a striking contrast with the Teachers.)

A universalizing interpretation of this finding would be that culture and language are not interdependent; a more concrete interpretation would be that Puerto Ricans who do not speak Spanish are still Puerto Ricans. A realistic interpretation of these findings might infer first, that both language use and cultural identity are undergoing change in response to economic and social transformations; second, that

Spanish is considered an important, though not the only or ultimate indicator of Puerto Ricanness; and third, that (primarily young) Puerto Ricans who do not speak Spanish or have only a passive knowledge of it are not ostracized.

Other findings which lend support to these interpretations are that English is not seen as a division, or even as a threat to the culture; and the consensus is that bilingualism will result from the dynamics of language in the present Puerto Rican sociolinguistic situation in New York.

From reported language abilities and usage, it also appears (as it did ethnographically) that bilingualism is widespread, and that the mixing of the two languages is not negatively evaluated. In fact, 'mixing the two' as a category occurred with about the same frequency as Spanish and English in the report of language use. Speakers who are bilingual and mix the languages are perceived by the Block to be most widespread in the community, by the Block.

4.3 Language Use: Speaking, Literacy, Media

Habitual language use has several aspects. Reported usage in various domains yielded the finding that more people report using Spanish in more situations. A battery of questions is here being summarized, but in general, less English usage is reported. Even among adolescents, whose Spanish was observed to be less elaborated, bilingual behavior is often reported in lieu of English for several situations. The Teachers report for their own 'dominance' slightly

less Spanish, less (and less mixed) bilingual behavior, and more English than the Block, as seen in (11) in the Appendix (whatever they may mean by 'dominance'). The Teachers are, of course, bilingual by profession and report literate and spoken, passive and active skills, in both Spanish and English, but the contrasting reports in (11) reveal attitudes, and in addition actually approximate the proportion and comparison in many other measures of reported usage and language resources.

The Block embraces Spanish affectively and reports using Spanish, and children born and raised in the United States have been observed in many settings to speak Spanish. Yet a contradiction is evident here:

> Why do people who report greater skills in English comprehension, speaking, reading and writing also indicate that they speak Spanish more often than English?

It is probably the paradox of 'unequal development' (see García 1978). The linguistic potential of children who are raised in Spanish-speaking homes is not being developed, because there are greater instructional resources for the development of English in schools. Bilingual education programs only reach a small percentage of Hispanic children, and in only a small fraction of those programs are Spanish skills developed parallel with English. In sum, there is limited access for the community to the means of developing full literate competence in Spanish, even though this is desired, with the consequence that linguistic resources are being wasted. This contradiction seems to apply to all including older people who do not read or write, adults who were educated in English, and children who now can speak English to their bilingual parents and to others

(but not all) of their contacts; yet the community desires to retain Spanish, and develop fully bilingual skills.

The unanimous voice of the 'community' can be heard in several items ((13) in the Appendix) concerning maintenance and the relationship of language to culture. These responses speak more cogently than argumentative positions on these matters. The reports regarding literacy must be highlighted before the paradox just posed is set aside. Teachers report much more reading in general than the Block, and their educational level is, of course, higher. The Block possesses many of the English skills, but they are not cultivated and less used. More seriously, despite some efforts, the affective attachment to Spanish is not being elaborated into a literate standard. This paradox shows its ethnographic, attitudinal and linguistic aspects in sections 3, 4 and 5 of this report. In the discussion we will again return to the implications of these findings and interpret them with regard to language development within the community.

Another item which reveals the differences in attitudes and use regarding language is the hypothetical situation of an encounter with a 'Puerto Rican' person, who is known to be Puerto Rican, but whose language abilities are unspecified. The Teacher sample again chose English in greater numbers. And many more of the Teachers said it would depend or they would let the other person initiate (marked 'situational' in (14) of the Appendix).

And in the response to 'What language feels most comfortable?' (15),

an interesting comparison may be seen in the responses 'Both Mixed' for the Block and 'Both But Separate' for the Teachers. (Another attitude toward mixing is implied in (15a) of the Appendix.)

Media are the third major class of language input to speakers in the ecology of the speech community, in addition to spoken usage and literacy. In reporting their use of the television and radio (16), more Teachers report using 'none' of the media except English radio. The greatest dissimilarity between the two samples lies in the category of much listening to Spanish radio. That item reflects the greater Spanish-language orientation of the Block, and underlines the cultural importance of Latin music and news to the community at large. The greatest media impact--it comes as no surprise--is the programming in English on television. Many children whose parents do not let them go out onto the streets and stoops to play, watch television often during non-school hours. And several Teachers mentioned the television as one of the greatest influences on their own acquisition of English.

Despite the report of greater skills in English, more people report speaking Spanish or both, in more situations than they do English. This finding, based on a series of questions concerning which languages are spoken to various kin and acquaintances, indicates the attachment to Spanish and its value in the communicative competence of speakers (Attinasi 1979:449). In response to another pair of inquiries, a sizeable majority reports an increase in the use of English over the last few years (see (17)). Given that Spanish was the first language

learned by most, and that many pressures to use English are evident in the United States, this increase is understandable, even among older people. When correlated with language abilities, few bilinguals report an increase in English and many report speaking more Spanish. Most interestingly of all, the young adults, more than any other age group in the Block, report an increase in the use of Spanish. Will the present adolescent group follow the path of these young adults? Contradictory forces allow, on the one hand, the neglect of Spanish, because English-speaking bilinguals are increasingly present. But on the other hand, the adolescents need Spanish to communicate with recent arrivals and with resident Spanish speakers and for communication in Puerto Rico, should they themselves migrate.

Despite stereotypes and accusations that Puerto Rican linguistic abilities are inferior in Spanish or English, or damaged because of bilingualism, the attitudes of the respondents support the viability of the kinds of communication observed ethnographically (section 3) and analyzed quantitatively (section 5). In the subsample used for linguistic analysis two-thirds considered themselves speakers of 'good Spanish' (see (18)). On the whole, half the Block considered themselves speakers of 'good' Spanish and 'good' English, and even higher correlations were found between, for example, Spanish by Age, and English by Highest Grade Completed. The Teacher sample was divided in opinion many ways, but three groups of ideas seemed salient. Some said that 'good Spanish' is educated Spanish; some said that good

Spanish is native speakers' ability; and some said that good language is a loaded and biased term.

'Good Spanish,' in the minds of those from the Block who accept the term, has several aspects. Some consider pronunciation and vocabulary to be important. These points of emphasis reflect, of course, negative stereotypes of accented speech and the attention to mixing and word-borrowing. Others, however, especially Teachers, combatted the imposition of such judgements and said that clarity of communication--ability to be understood in a practical sense--is most important. More Teachers than Block members noted grammatical correctness as an indicator of good Spanish, but in both samples the emphasis on grammar was not great. Several mentioned all these factors.

In general, Puerto Ricans, especially older Puerto Ricans who were raised as native speakers of Spanish, are considered to speak Spanish well. The issues of literacy, successful achievement in school or on tests were considered irrelevant or were not considered.

In the midst of these differences, the value of the Puerto Rican variety of Spanish is upheld and the confidence and competence of Puerto Ricans in Spanish is supported.

4.4 Language Maintenance and Shift

The attitudinal base of the sociolinguistic situation among the two samples of New York Puerto Ricans we have studied supports a view of societal bilingualism (Fishman et al., 1971:539-611) at present.

Although Fishman's typology would indicate that bilingualism without diglossia, in which the two languages have neither specific status nor domains of differentiation, is usually a transitional stage, the ethnographic and attitudinal analyses indicate that bilingualism without diglossia exists, and yet in this community bilingualism is stable at this time.

Individual speakers may choose to interact in one or other language (or to use both) depending on the language of family members or co-workers, or other factors related to participant, topic, style--in general, to the context of speaking. Thus, situational constraints and norms of speaking at microlinguistic levels would seem to contradict the predictive value of diglossia as necessary to language maintenance (and no diglossia as indicative of loss). The concept of diglossia was never intended to apply to bilingualism, according to the original article by Ferguson (1959), and it clearly needs modification to apply to this situation (see Attinasi and Pedraza, forthcoming).

Perhaps most salient of all is the social dynamic of the community. The economic position of most is working class (with about one-fourth unemployed), and despite the fact that many want to see themselves in permanent association with the U.S., self definition, cultural identity and need to remain distinct as Puerto Ricans are strongly sustained.

Findings regarding beliefs and values about language and the particular languages and varieties of Spanish and English in the

sociolinguistic environment provide an understanding of these sociolinguistic processes. In linguistic, cultural and political terms, a dialectic of forces may be distilled from the observation of social interaction, attitudes and language use, as we discuss in section (6). Neither assimilation, nor nationalism nor dissolution into an undifferentiated common class struggle (with Blacks, other Hispanics or working-class 'ethnics') seem to explain the behavior we have observed.

In their language abilities and reported use, in their attitudes toward culture and in observed behavior, the young adults appear to be a key to understanding why language loss is not occurring, and more generally, how the social dynamics of the society are reflected in language. The young adults, more than all other groups combined, express the attitude that Spanish is very important to Puerto Ricanness, and are second to the older people in emphasizing the importance of language to group solidarity.

The age-group breakdowns on many items concerned with language invite the following speculative scenario for the sociolinguistic cycle in the present community:

> The younger children learn Spanish and English and hear both from the separate speakers and from those who combine them in various ways. The older children and adolescents speak (and receive communication) increasingly in English. This accords well with their position as students and as members of peer groups which include non-Hispanics.

As the school experience ends and employment responsibilities begin in young adulthood (successfully or unsuccessfully), the use of Spanish increases, in mixed usage and in monolingual speech to older persons. Young adults then reactivate the Spanish skills acquired in childhood and left rather passive in adolescence. Mature adults speak both languages. At present older persons are Spanish monolingual or nearly so.

The new roles associated with adulthood involve more serious relationships with family members of all ages. The familial networks, just like the general community, are affected by migration, and thus the necessity of bilingualism may be seen. Migration patterns not only place certain persons (all ages are involved) in the Spanish-speaking environment of Puerto Rico, but also require those who remain in New York to communicate with persons who circulate between the two places, with recent arrivals from Puerto Rico, and with persons who came after maturity and continue to speak Spanish. Therefore, although there are societal institutions which tend to reinforce each language, the weight of Spanish-maintaining counterforces becomes prominent as Puerto Ricans pass from adolescence to adulthood.

4.5 Language and Puerto Rican Identity

From these results emerge views of Puerto Rican identity that are different from views that are often argued. We think that none of the following apply:

-that Puerto Ricans in New York are assimilating and losing Spanish;

-that the community is recalcitrant and does not want to speak English;

-that the Puerto Ricans want to retain in New York everything that is in Puerto Rico;

-that a new-creole life and creolized language are being created.

Spanish, though not seen as necessary or essential to the community's identity, is desired by all and considered important or very important by a majority. English also is desired; and Puerto Rican

culture is seen as compatible with English (though never to the exclusion of Spanish). Traditions are not accepted uncritically, and life in Puerto Rico is romanticized by very few. Neither living in Puerto Rico, nor living in a Puerto Rican neighborhood like El Barrio, is considered more than partially important in being Puerto Rican. Many feel that aspects of New York Puerto Rican life are unique. And in regard to language, the issue is not a dichotomy: either Spanish or English. Rather both Spanish and English occur in many ranges of usage. Norms of interaction exist that are unique or distinctive, in either language and in both simultaneously, but this speaking does not cease to be comprised of Spanish and English, just as its speakers do not cease to be Puerto Rican. The sense of the Puerto Rican at this time is intertwined with United States culture and economy, with United States experience and also with the traditional culture of Puerto Rico.

5.0 Sociolinguistic Analyses

5.1 Introduction

Given the particular configuration of use of both Spanish and English in this stable bilingual community just described, the positive attitudes expressed by speakers towards both, and the generally negative attitudes of non-community members towards language varieties used by Puerto Ricans in New York, we may now turn to some properly linguistic questions. What sorts of changes, if any, come about when two languages are in contact, a situation which has been hypothesized to accelerate, or even cause, linguistic change? In the case of the 'mother tongue' or Spanish, in particular, it has been claimed that lack of exposure to a 'standard' caused by transplanting this language and culture into a new environment, must with time, cause the language to diverge farther and farther from the standard until communication with monolingual speakers is endangered.

From an attitudinal point of view, the stereotype is that while acquiring the host language, the original language is deformed or debased, mainly through borrowings, calquing[3] and interference from English morphology, syntax and semantics. Thus, languages spoken by immigrant groups in the United States may be referred to as Spanglish, Tex-Mex, American-Portuguese, American-Swedish, etc.--labels which have vaguely, if not overtly, derogatory connotations, as these are thought to be somehow distinguishable from the original language because of influence from English.

From a linguistic point of view, bilingualism has been said to be the major determinant of linguistic convergence, which usually involves the lexicon, but may also affect the grammar. In fact, language contact can cause such far-reaching changes as to modify the structural type of a language (Weinreich 1953, Gumperz and Wilson 1971).

The question of convergence is of particular importance for the Puerto Rican community in New York, since English has been acquired by large segments of the population without losing Spanish, even in the third generation, by which time most immigrant groups have completed the shift to English. Indeed, the ethnographic and attitudinal components of our study have repeatedly indicated that the maintenance of Spanish in the community is both desired and feasible.

What is the nature of the Spanish spoken by Puerto Ricans in New York? What is its relationship with other varieties of Spanish, and what changes is it undergoing? Are its structures changing in the direction of English?

To address these issues, the sociolinguistic component of our research has examined the morphophonological, syntactic and semantic levels of linguistic structure. The studies reported on here were drawn from data collected from a subsample of 20 of the 91 speakers interviewed on the Block. These were chosen on the basis of their representativeness with regard to several parameters, including age, sex, participation in key social networks, age of arrival to the United States, age of acquisition of English, and most importantly, present

reported and observed bilingual ability. About half of the speakers may be characterized as balanced bilinguals; the remainder are Spanish-dominant.[4] The sample was constructed in this way under the assumption that influence from English would be more apparent in the speech of those who report and are observed to use it as much as Spanish.[5]

In ensuing sections we briefly review the findings of these quantitative studies of language use in a bilingual setting. Though independently motivated, they all point most strikingly to a single result--the integrity of the Spanish language at its deeper levels despite constant contact with English and purported lack of exposure to the 'standard.' While balanced bilingual and Spanish-dominant speakers will be shown to be distinguishable by their use of English, as would be expected, the most significant difference in their use of Spanish, at least on the basis of these studies, is the frequency with which they speak it.

5.1 Variable Concord in Plural Marking

The first problem area we discuss is the variable deletion of syllable-final consonants (s) and (n). This deletion process is characteristic of Caribbean Spanish (Ma and Herasimchuk 1968, Cedergren 1973, Cedergren and Sankoff 1975, Terrell 1975a, 1975b), and in previous studies of monolingual Puerto Ricans in Philadelphia (Poplack 1979a, 1980a, in press), we investigated the functional implications of deletion when (s) or (n) serve as a marker of plurality. How is plurality conveyed when the plural marker is deleted? In the case

of (s), it was found that though (s) deletion from determiners, nouns and adjectives in the noun phrase did not occur if it threatened to make the sentence ambiguous, this possibility rarely occurred, because of many types of contextual disambiguation, and the main constraints on (s) deletion were phonological and syntactic. The syntactic constraint was a quantitative tendency towards local concord--noun phrases tended to retain a marker on all their components--determiner, noun and adjective--or more frequently, on none of them. In the case of the plural marker (n) on verbs, it was found that this was relatively rarely deleted and that deletion was more strongly constrained by functional (i.e. informational) factors.

In the East Harlem project, we then decided to study the interaction between (s) and (n) deletion processes in the same sentence, while still taking account of other contextual indicators of plurality, since plural concord in Spanish is really a sentence level phenomenon. The study was undertaken to see whether marker deletion in the noun phrase and marker deletion in the verb phrase specifically constrained each other, whether on the other hand the local concord in the noun phrase extended to the verb phrase as well, so that deletion would either co-occur in the two constituents simultaneously or would be simultaneously blocked, or whether the noun phrase and the verb phrase acted independently, subject only to the overall functional constraint against ambiguity.

Standard Spanish marks the plural redundantly across the noun

phrase onto each determiner, noun and adjective in the constituent. Plurality is then repeated in the verb phrase, where the verb must agree with its subject in person and number, as in (1).

1. Tu sabes, los doctores trataron de--sin operarla, a ver si la podían arreglar. 'You know, the doctors tried to-- without operating, to see if they could fix her up.' (02/12)[6]

This results in a great deal of redundancy in the sentence. Moreover, almost every sentence or its context also contains non-inflectional indicators of plurality--morphological, lexical, syntactic and semantic--so that redundancy is even greater than would appear from the surface.

Although English also has a concord rule for plural marking, it is characterized by a lesser amount of surface inflection than the Spanish rule. As may be seen in the translation of (1), English only marks plurality inflectionally on the noun, and with the {ø} morpheme on the verb. The standard English and Spanish marking sequences may be schematized as in (2). But because both (s) and (n) are subject to deletion, we could also theoretically obtain, for a two-slot Spanish noun phrase, any of the eight sequences listed in (2c), after deletion has applied.

2a. Standard Spanish marking sequence: SSN[7] (Los doctores trataron.)
2b. Standard English marking sequence: ØSØ (The doctors tried.)
2c. Possible Spanish marking sequences after deletion has applied:

SSN	SSØ
SØN	SØØ
ØSN	ØØØ
ØSN	ØSØ

In a study of some 2,500 sentences consisting of an overt or deleted noun phrase and a verb phrase (Poplack 1980b), we sought to answer two types of questions. The first concerns the nature of patterns of plural marking at the sentence level, and the second, the effects on these patterns of long-term contact with English.

Given these differences between Spanish and English in both amount and place of plural marking, were we to find that balanced bilinguals deleted markers overall more frequently than Spanish-dominant speakers and/or that the sequence of such marking as is present in surface structure resembles the English schema (ØSØ), we might hypothesize that these results are due to influence from and convergence with English.

As Table 1 shows, however, this is not the case. Though bilinguals delete more from determiners, they also delete more from nouns, and less from verbs, compared to the Spanish-dominant speakers. This is the opposite of what we would expect from English influence.

BILINGUAL						SPANISH-DOMINANT					
Determiner		Noun		Verb		Determiner		Noun		Verb	
Ø	S	Ø	S	Ø	N	Ø	S	Ø	S	Ø	N
.492	.508	.787	.213	.079	.921	.294	.706	.690	.310	.090	.910

Table 1. Proportion of deleted and retained plural markers on determiners, nouns and verbs for bilingual and Spanish-dominant speakers.

We also note from Table 1 that in the noun phrase most plural inflections are deleted. Indeed, in only 39% of all noun phrases was plurality

conveyed inflectionally at any site, determiner, adjective or noun. Although these deletion rates might seem rather high, they are in fact fairly common for Caribbean dialects of Spanish, as compared to the quantitative studies of Cedergren in Panama (1973), of Terrell in Cuba (1979a) and the Dominican Republic (1979b). They are actually lower than the rates found for a functionally monolingual Puerto Rican community in Philadelphia (Poplack 1979a). Verbs, on the other hand, <u>are</u> inflected with one or another phonetic variant of (n) 93% of the time, showing a tendency in Puerto Rican Spanish to mark the plural on the verb and not in the noun phrase, the opposite of what is required for English.

We may next ask whether the verbal plural markers are retained in the same sentences in which the nominal plural markers are lost. Table 2 shows that the opposite effect prevails. It is true that a large proportion of verbal markers is retained (about 86-88%) when markers are deleted from the noun phrase, but this simply reflects the fact that (n) deletion is not very advanced as a phonological process. Indeed, a significantly greater percentage of verbal (n) is retained when the markers are also retained in the noun phrase.[8]

Noun Phrase Marking Pattern	% Deleted Verbal (n)	N
ØØ	14%	(13/91)
Ø	12	(27/233)
Total for uninflected NPs	12	(40/324)
SØ	7	(8/114)
SS	7	(5/67)
S	6	(5/90)
ØS	23	(3/13)
Total for inflected NPs	7	(21/284)

Table 2. Percentage of deleted verbal(n) for different marking patterns in the noun phrase.

Extension of the concord rule, which we had already noted for the noun phrase, into the verb phrase, should not surprise us if we recall that the standard Spanish plural marking rule is sentential. This behavior would also indicate that inflecting (but not other ways of converying information) appears to proceed regardless of functional criteria (cf. Poplack 1980, section 4).

Is there any difference between Spanish-dominant and bilingual speakers? Table 3 gives the observed frequencies and proportions of plural marking sequences in Spanish, along with expected proportions for each group. The expected values are calculated from the information in Table 2, under the hypothesis that deletion at any given position is statistically independent of deletion in any other.

Marking Patterns for: 2-slot Noun Phrase		BILINGUAL			SPANISH-DOMINANT		
NP	VERB	N	OBS	EXP	N	OBS	EXP
* ØØ	N	54	(.391)	.357	57	(.218)	.185
SØ	N	49	(.355)	.368	102	(.389)	.443
* SS	N	18	(.130)	.100	68	(.259)	.199
* ØØ	Ø	9	(.065)	.031	8	(.031)	.018
ØS	N	4	(.029)	.096	10	(.038)	.083
SØ	Ø	2	(.014)	.031	8	(.031)	.044
* SS	Ø	1	(.007)	.009	7	(.027)	.010
ØS	Ø	1	(.007)	.008	2	(.008)	.008
1-slot Noun Phrase							
Ø	N	98	(.705)	.725	186	(.635)	.628
S	N	32	(.230)	.196	82	(.280)	.282
Ø	Ø	6	(.043)	.062	22	(.075)	.062
S	Ø	3	(.022)	.017	3	(.010)	.028

Table 3. Proportions of various plural marking patterns on the sentence level, as observed and as predicted under the null hypothesis of no concord and no functional compensation.

We note first that the difference between observed and expected values depend on whether or not local concord obtains in the noun phrase. For those sequences containing local concord (marked with an asterisk), we observe more sentences than would be expected under the hypothesis that marking in each slot proceeds independently of any other. Where there is no local concord we observe less than would be expected. This indicates that marking in the noun phrase does not proceed independently, and that the concord effect observed for noun phrases in the functionally monolingual community also holds true in this bilingual community on the sentence level.

While there are distinctions between Spanish-dominant and bilingual speakers, these are consequences of differences in predicted values for the two groups, i.e. differences in overall deletion rates for each grammatical category. Both groups show the same discrepancies between observed and expected values due to local concord. What are the consequences of the dissimilarities between the two groups? We saw from Table 2 that bilingual speakers show a greater overall tendency to delete markers from both determiners and nouns than the Spanish-dominant speakers and a lesser tendency to delete from verbs. This leads to different preferences between the two groups for the three most important sequences at the top of the Table. Spanish-dominant speakers prefer marking on the determiner, deleting from the noun and marking on the verb (SØN), followed by the standard marking sequence SSN, and then by marking on the verb alone (ØØN). Bilinguals favor verbal marking alone, then marking on the determiner and the verb, and finally, the standard full concord form.

Now, if one result has emerged consistently from different quantitative studies of (s) deletion in Caribbean dialects of Spanish and Brazilian Portuguese, it is that determiners, or elements in the first position in the string, are most conservative with regard to marker retention (Ma and Herasimchuk 1968, Cedergren 1973, Terrell 1975, Guy and Braga 1976, Scherre 1978), although by no means does retention operate categorically here, even in functionally monolingual communities (Poplack, in press). The behavior of the bilinguals may be explained by the fact that they have generalized the deletion rule, which operates most frequently in nouns and adjectives, to a category, determiner, where its operation has been comparatively infrequent. The differences between expected and observed frequencies are the same for Spanish-dominant and bilingual speakers, indicating that aside from overall deletion rates the two groups behave similarly. In particular, the differences in pattern frequencies cannot be attributed to influence from English; none of the sequences involved is cognate with English. The actual English sequences ØSØ (The doctors tried.) and SØ (Doctors tried.) are almost non-existent, representing less than 1% of the Spanish data for both groups.

Thus we see that while reorganization has clearly taken place with regard to the standard Spanish rule for plural marking, we have no reason to attribute it to influence from English. It is due rather to an old and widespread process of phonological weakening and deletion of syllable-

final (s)--first attested in Spain in the 16th century, and to the elimination of inflectional, but not other types of redundancy from the sentence. This is made possible because 1) the Spanish verb (unlike the English verb) carries information as to person, number and tense, 2) inflections are generally retained on these verbs, and 3) a large amount of non-inflectional redundancy remains in the discourse.

5.2 Social and Syntactic Functions of Code-Switching

Another area of study concerns code-switching, or the alternation of two languages within a single discourse, sentence or constituent, as in (3).

> 3. But I used to eat the BOFE, the brain. And then they stopped selling it because TENIAN, ESTE, LE ENCONTRARON QUE TENIA [they had, uh, they found out that it had] worms. I used to make some BOFE! DESPUES YO HACIA UNO D'ESOS [then I would make one of those] concoctions: The garlic CON CEBOLLA, Y HACIA UN MOJO, Y YO DEJABA QUE SE CURARA ESO [with onion, and I'd make a sauce, and I'd let that sit] for a couple of hours. Then you be drinking and eating that shit. Wooh! It's like eating anchovies when you're drinking. Delicious! (04/101)

Code-switching has been observed by Pedraza to function as a widespread mode of communication on the Block. Educators and intellectuals (Varo 1971, de Granda 1968, LaFontaine 1975) have seen such language mixture to constitute evidence of the disintegration of Puerto Rican Spanish language and culture, although as pointed out in section (4), community members themselves recognize its existence and do not view it negatively.

An early pilot study of a single balanced bilingual speaker observed to be one of the most prolific code-switchers on the Block

(Poplack 1978b), provided quantitative empirical evidence that first, code-switching is governed by functional or pragmatic constraints, as had already been noted anecdotally in the literature (Gumperz 1971, 1976; McClure 1977, Valdes 1976, 1978). We found that the occurrence of code-switching is affected by both the ethnicity of the interlocutor and the formality of the speech situation, such that it is more frequent when speaking with another Puerto Rican, and in informal speech styles.

Aside from the extralinguistic constraints, we wanted to account for the syntactic distribution of switch points. Most of the literature on code-switching is only tenuously related to empirical research, and almost none of it is based on systematic analysis of a large corpus of natural speech. Nevertheless many theories of syntactic constraints on code-switching have been presented. Scholars who have proposed such constraints include Gumperz (1976), Hasselmo (1972, 1979), Timm (1975, 1978), Wentz (1977), McClure (n.d.), and Gingràs (1974). Most of the constraints derive in an ad hoc way from the linguist's own intuitions or from acceptability judgements.

In the 400 switches analyzed from the balanced bilingual speaker, we found exceptions to every one, which led us to posit two more general constraints which hold very strictly for these data as well as the data published in other studies, though they had not been formally enunciated as such in the literature.[10]

The first, the <u>free morpheme constraint</u>, prohibits a switch

from occurring between a bound morpheme and a lexical form unless the latter has been phonologically integrated into the language of the former. This excludes switches like (4a), which in fact are not attested, but not forms like (4b), although we consider this an instance of monolingual Spanish speech, and not a code-switch.

4a. *RUN-eando 'running'
4b. jangueando 'hanging out'

The second, the equivalence constraint, states that the order of sentence constituents immediately adjacent to and on both sides of the switch point must be grammatical with respect to both languages involved simultaneously. This requires some specification: the local co-grammaticality or equivalence of the two languages in the vicinity of the switch holds as long as the order of two sentence elements, one before and one after the switch, is not excluded in either language. This is illustrated in Figure 1, where the dotted lines indicate permissible switch points and the arrows indicate ways in which constituents from two languages map onto each other. The speaker's actual utterance is reproduced in (C).

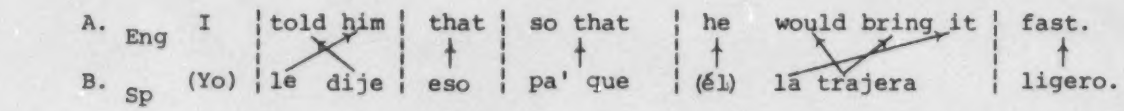
A. Eng I told him that so that he would bring it fast.
B. Sp (Yo) le dije eso pa' que (él) la trajera ligero.
C. CS I told him that PA' QUE LA TRAJERA LIGERO. (04/73)

Figure 1. Permissible code-switching points.

Operation of the syntactic constraints permits only code-switched utterances which, when translated into either language, are grammatical

by both L_1 and L_2 standards, and indicate a large degree of competence in both.

To ascertain whether these results were merely the artifact of having studied a balanced bilingual, a larger study was undertaken, including both Spanish-dominant and balanced bilingual speakers (Poplack 1979b). Analysis of almost 2,000 switches confirmed that these constraints were upheld by even the Spanish-dominant speakers, who in this sample are non-fluent bilinguals.

Speakers were found to engage in at least three types of code-switching, each one characterized by switches of different levels of constituents, and each one reflecting different degrees of bilingual ability. These are exemplified in (5).

5a. 'Tag'-like Switch:

Vendía arroz 'N SHIT. 'He sold rice and all.' (03/24)

AVE MARIA, which English? 'Oh God, which English?' (08/436)

5b. Sentential Switch:

It's on the radio. A MI SE ME OLVIDA LA ESTACION. I'm gonna serve you another one, right? 'I forget which station.' (08/187)

5c. Intra-sentential Switch:

SI TU ERES PUERTORRIQUEÑO, your father's a Puerto Rican, you should at least DE VEZ EN CUANDO, you know, HABLAR ESPANOL. 'If you're Puerto Rican, your father's a Puerto Rican, you should at least sometimes, you know, speak Spanish.' (34/25)

(5a) shows a switch of a tag or interjection, freely moveable constituents which can be inserted almost anywhere in discourse without fear of violating a grammatical rule of either language. This type of

segment may be switched into L_2 with only minimal knowledge of the grammar of that language. Next on the scale are full sentences or larger segments, which require much more knowledge of L_2 to produce (5b), although hypothetically, not as much as is required by the third category, intra-sentential switches (5c). In order to produce this latter sort of switch, the speaker must know enough about the grammar of each language and the way they interact to avoid ungrammatical utterances.

Figure 2 displays our finding that non-fluent bilinguals are able to code-switch frequently, and still maintain grammaticality in both languages by favoring tag-switching, the type requiring least skill, while the balanced bilinguals favor the sentential or intra-sentential type, which we had hypothesized to require most skill. Each line on the graph represents a speaker.) The figure shows that reported language ability (which in all cases but four corresponds to observed ability) is an excellent indicator of code-switching patterns. Figure (2a) shows that most of those who report that they know, feel more comfortable in, and use more Spanish then English, tend to switch into L_2 by means of tag-like constructions, sometimes to the practical exclusion of sentential or intra-sentential switches. Those who claim to be bilingual, on the other hand, show a reversal (2b). They favor large amounts of the switches hypothesized to require most knowledge of both languages, sentential and intra-sentential switches.

FIGURE 2

PERCENTAGES OF SWITCH TYPES FOR SPANISH-DOMINANT & BILINGUAL SPEAKERS

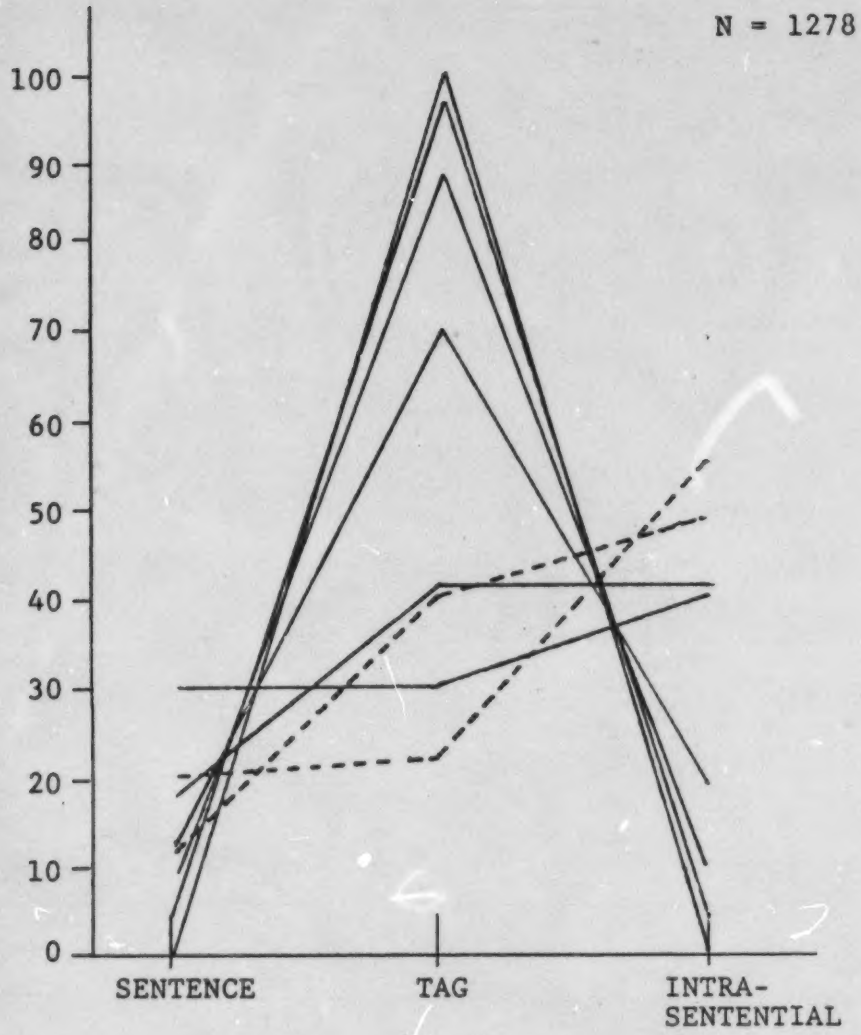

Figure 2a. Percentage of Switch Types for Reported Spanish-dominant Speakers.

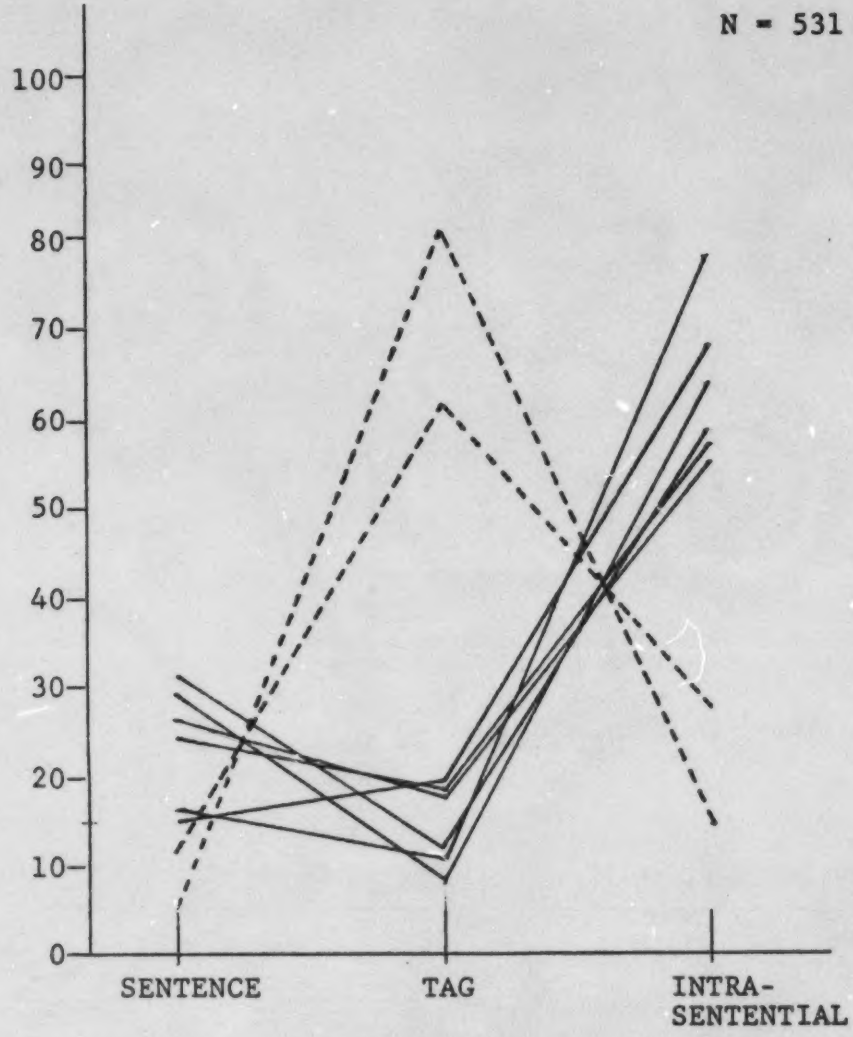

Figure 2b. Percentage of Switch Types for Reported Bilingual Speakers.

The few exceptions to these patterns are represented by the dotted lines on the graphs. These are precisely the cases where ethnographic observation and linguistic analysis were previously found to conflict with self-report, because the speakers either underrated or overrated their ability in English. The studies provide evidence that rather than representing a debasement of linguistic skill, code-switching is actually a suggestive indicator of bilingual competence.

Linguistic performance constrained in this way must be based on simultaneous access to the grammatical rules of both languages, raising the question of the existence and nature of code-switching grammar.

5.2.1 A Probabilistic Code-Switching Grammar

We thus attempted to describe formally how the code-switching constraints determine the way the two monolingual grammars may be combined in generating discourse containing code-switches (Sankoff and Poplack 1979). As the code-switching constraints are on the surface syntax of a sentence, we adopted a formalism based on direct generation of surface phrase structures by a context-free grammar (having shown that switched items are in no way constrained to be of the same language as the elements which may be adjacent to them in deep structure, but rather, if at all, by their surface neighbors). We then probabilized the rules of the grammar so that it could account for the quantitative patterning evident in the data.

An important conclusion drawn from this part of the exercise is that even in portions of discourse in close proximity to one or more switches, the speaker strictly maintained both qualitative and quantitative distinctions between Spanish and English grammars. Whenever a stretch of discourse, e.g. a sentence or constituent, could be clearly identified as monolingual, the rules of the appropriate monolingual grammar, and their associated probabilities, were exclusively at play. This served as a theoretical framework for an analysis of syntactic boundaries and their switch propensities. Previous quantitative studies (Pfaff 1975, 1979; Poplack 1979b) have shown what proportion of code-switches involved nouns, what proportion predicate adjectives, etc. But just because single nouns, for example, were found to constitute 10% of the switches, while predicate adjectives made up only 2%, this does not mean that nouns are more likely to be switched than predicate adjectives. It could simply be that nouns occur five or 10 times more frequently in discourse than predicate adjectives. The original contribution of this work is that for the first time we present actual code-switching rates, and these show that the equivalence and the morpheme constraints have implications which go beyond their qualitative formulations.

To obtain the probability for each syntactic boundary to be a switch point, we first estimated the frequency in the speech of one bilingual speaker, of the syntactic boundaries eligible to be the site of a code-switch. These frequencies of <u>potential</u> sites are then

compared with actual switch frequencies at these sites, tabulated for all 20 speakers in the previous study. The results are given in Table 4. We will limit ourselves to highlighting some of the more striking findings here.

PROPENSITY	SWITCH SITE	RATES
VERY HIGH	Between tag and preceding or following category	40 %
	Between ADV and ADVB'L and preceding or following category	5-10
	Between PRED ADJ and preceding category	15
	Between DET and N or NP	13
HIGH	Between $\{^{V}_{VP}\}$ and $\{^{N}_{NP}\}$	2.7-3.6
	Between subordinate conjunction and following category	3.9
	Between coordinate conjunction and preceding category	9
AVERAGE	Between coordinate conjunction and following category	2.2
	Between ADJ and $\{^{N}_{NP}\}$	2.2
	Between $\{^{N}_{NP}\}$ and $\{^{V}_{VP}\}$	2.3
	Between PREP and following category	2.3
	Between $\{^{V}_{VP}\}$ and PREP PHRASE	2.3
	Between $\{^{AUX}_{MOD}\}$ and $\{^{V}_{VP}\}$	.9
LOW	Between PREP PHRASE and ADJ'L (except after $\{^{V}_{VP}\}$ and preceding category	<.1
	Between subordinate conjunction and preceding category	<.2
	Between pronoun and preceding or following category	<.1
PROHIBITED	Between clitics and V	
	Between AUX and NEG	
	Between NEG and $\{^{V}_{MOD}\}$	
	Between VP and subject NP	

Table 3. Normalized code-switching rates at different syntactic boundaries.

Table 4 shows that constituent boundaries are clearly subject to a hierarchy ranging from very high propensity to be the site of a switch, to total absence of switching. We remark first that the prohibited switch sites are precisely those in the vicinity of which the number and/or order of sentence elements generated by a given rule is excluded in one of the two languages, i.e. those which violate the equivalence constraint. Included here are constructions involving NEG placement, which in Spanish directly precedes the main verb, while in English it follows an auxiliary or a modal, and others which have non-equivalent surface structures in the two languages. (Note that these restrictions are merely an artifact of the rules shared by the two languages involved in the switching, and will differ among language pairs.)

At the other extreme, the greatest propensity to switch is shown by the category TAG, both when it precedes and follows each of the 16 other syntactic categories studied, and despite the fact that this segment occurs relatively rarely in the non-code-switched discourse studied. This reflects the fact that tags are subject to minimal if any syntactic restrictions and so may be switched easily without fear of violating the equivalence constraint. Indeed, we have just seen that switches of precisely this category characterize the discourse of non-fluent bilinguals, allowing them to participate in the code-switching mode although they may lack the bilingual ability in L_2 to engage in more complex switching.

Showing a relatively low propensity to be the site of a switch are the points between subject pronoun and other categories, and between auxiliary or modal and verb. This, on the one hand, explains why categorical constraints have been posited against switching here (Timm 1975, Gumperz 1976, Barkin and Rivas 1979), though they are, in fact, attested, and on the other, illustrates the utility of a quantitative approach in accounting for performance data.

Finally, we remark that a large proportion of syntactic boundaries is affected by the same, 'average' switch rate of approximately 2.2 - 2.3%. Now, if the equivalence and bound morpheme constraints were not only qualitatively but also quantitatively the only constraints on code-switching, we would expect all switch rates for all boundaries to be the same. And indeed, apart from the especially susceptible types, which in some cases seem to approach being morphemic rather than syntactic boundaries, all other constituent boundaries involve switches at a rate proportional to the frequency of these boundaries in monolingual speech.

Although this is only a preliminary analysis, its interpretation is quite clear: The equivalence and free morpheme constraints extend quantitatively to performance data--not only are all boundaries which satisfy the equivalence constraint eligible for code-switching, but they are all equally <u>likely</u> to be the site of a switch.[11] Those exceptional boundaries which show a relatively low rate of switching involve two closely bound syntactic elements whose relationship

approaches, but does not quite enter, the domain of the free morpheme constraint. The analysis of code-switching has deep implications for grammatical theory, as it points to ways in which two languages can reconcile, but not change, their differences, to result in a mode of communication as widely functional as monolingual speech.

The evidence we have presented for the syntactic integrity of Spanish and English grammars, even when they are being used sequentially and simultaneously, bolsters other arguments for non-convergence of Spanish and English in the Puerto Rican speech community.

5.3 Verb Usage

In a quantitative semantic analysis of tense, mood and aspect in the entire Puerto Rican Spanish verbal paradigm, and again involving both Spanish-dominant and balanced bilingual speakers (Pousada and Poplack 1979), we compared the ranges of meaning covered by verb forms for the two groups, with those prescribed in normative Spanish grammars. Our goal was to examine the extent, if any, to which the Puerto Rican Spanish verb system has diverged from the standard, by ascertaining whether the semantic fields, or ranges of meaning, covered by verb forms were being extended or restricted, and in what direction: specifically, were some forms being extended to cover semantic fields of others which have fallen into disuse within the Puerto Rican Spanish system, or is there adaptation to specifically English semantic fields? To do this we first distinguished absolute from extended uses of verb forms. An example of the former would be use of the present progressive

to convey ongoing action in present time. Examples of extended uses are given in (6). A construction like (6a) was assumed to result from transference from English, because the present progressive occurred with a verb of perception, which in standard Spanish categorically requires the simple present. On the other hand, (6b) exemplifying use of the present to convey action in future time, is a perfectly acceptable extension of the uses of the Spanish simple present.

6a. Yo no estoy viendo eso. 'I'm not seeing that'. (002/314)
6b. Manana voy a Caguas. 'Tomorrow I'm going to Caguas'.

We then compared the rank distribution of the verbal forms in the speech of our sample with the Puerto Rican Spanish standard as represented by the written speech of a prominent Puerto Rican author, then with a sample of 15th century Spanish, with a sample of modern Andalusian Spanish, and finally, with the New York City English of a monolingual.

The results indicated, first, that there were virtually no instances of verbs being used in an ungrammatical or idiosyncratic way. Extended uses not attested in prescriptive grammars constituted less than 1% of the 9,000 verbs studied. Table 5 shows that of the 26 verb forms originally studied, there are only three inflected forms which are quantitatively important: the present, which represents half the data, followed by the preterite, and then the imperfect. All other inflected forms individually represent 3% or less of the data.

		Vernacular Puerto Rican Spanish						Standard PRS	
		Spanish Dominants		Bilinguals		All Speakers			
		N	%	N	%	N	%	N	%
INDICATIVE	present	3231	49.5	1078	50.2.	4309	49.6	133	49.3
	preterite	904	13.8	324	15.1	1228	14.1	25	9.3
	imperfect	543	8.3	148	6.9	691	8.0	15	5.6
	present perfect	143	2.2	43	2.0	186	2.1	6	1.1
	conditional	49	0.8	14	0.7	63	0.7	10	3.7
	preterite perfect	22	0.3	5	0.2	27	0.3	2	0.7
	future	12	0.2	3	0.1	15	0.2	5	1.9
	preterite anterior	0	0.0	1	0.0	1	0.0	0	0.0
	future perfect	-		-		-		-	
	preterite conditional	-		-		-		-	
PERIPHRASTIC	present modal + infinitive	245	3.8	78	3.6	323	3.7	12	4.4
	present periphrastic future	158	2.4	43	2.0	201	2.3	4	1.5
	imperfect modal + infinitive	23	0.4	16	0.7	39	0.4	0	0.0
	preterite modal + infinitive	15	0.2	6	0.3	21	0.2	1	0.4
	imperfect periphrastic future	4	0.1	4	0.2	8	0.1	0	0.0
PROGRESSIVE	present progressive	135	2.1	54	2.5	189	2.2	2	0.7
	imperfect progressive	26	0.4	5	0.2	31	0.4	0	0.0
	preterite progressive	6	0.1	3	0.1	9	0.1	0	0.0
SUBJUNCTIVE	present subjunctive	257	3.9	51	2.4	309	3.5	7	2.6
	imperfect subjunctive	71	2.0	10	0.5	81	0.9	2	0.7
	preterite perfect subjunctive	4	0.1	2	0.1	6	0.1	0	0.0
	present perfect subjunctive	1	0.0	1	0.0	2	0.0	1	0.4
	future subjunctive	-		-		-		-	
	future perfect subjunctive	-		-		-		-	
	imperative	173	2.6	82	3.8	255	2.9	0	0.0
	infinitive	510	7.8	176	8.2	686	7.9	45	16.7
TOTALS		6532		2147		8679		270	

Table 4. Verb distribution in Vernacular and Standard Puerto Rican Spanish.

When we examine how these verb forms are distributed to convey the semantic fields of {PRESENT}, {PAST} and {FUTURE}, we find that the preferred way of expressing present reference is through use of the simple present, while preterite and imperfect forms are generally used to express past reference, and that the periphrastic and simple present are also the preferred ways of expressing future time. This explains how Puerto Rican Spanish expresses past, present and future reference by means of a basic present ~ past tense distinction: the present has been extended to cover the semantic fields of the future form, which is used only rarely, and not necessarily to convey futurity. (In fact, one-third of the attested future forms were used for present reference.) These findings are in keeping with studies on Spanish in the Southwest (Floyd 1978), which although not quantitative, repeatedly indicate that these three verb forms are the most productive, maintaining their usual functions as well as expanding to include those of other forms.

Table 5 also shows strikingly little difference between what we are calling 'standard' Puerto Rican Spanish and that of the East Harlem sample, despite the fact that the 'standard' material was extracted from a written text. Statistical tests on these figures showed that the most significant differences between the two data sources are in the area of past tense forms--the East Harlem speakers used more due to their more informal speech style, which contained many narratives of personal experience requiring verb forms in the

past tense. The standard also shows significantly more of the inflected conditional and future forms. Use of the conditional is probably an aspect of learned or academic speech, and the future, as in other languages such as French and English, may be largely reserved as a marker of formal speech performance.

The Table also shows that there is remarkably little difference between the Spanish-dominant and bilingual speakers, despite the fact that the latter could be hypothesized to be more under the influence of English. In fact, the most startling aspect of these findings is their great regularity. Log-likelihood tests based on these figures show that the only significant area of difference is in use of the subjunctive, which the bilinguals use somewhat less than the Spanish-dominant speakers. Now just this tendency has been hypothesized (e.g. de Granda 1968) to be due to influence from English, which has lexicalized or lost most of the distinctions expressed by the subjunctive. Although this possibility cannot be overruled, no conclusive evidence in its favor has yet been presented. In fact, the Table shows that 'standard' Puerto Rican Spanish is characterized by subjunctive usage closer to that of the bilinguals than to the Spanish-dominant speakers. These results, then, cannot be considered evidence for any significant degree of convergence of vernacular Puerto Rican Spanish towards English.

Figure 3 correlates the rank order of inflected form frequencies among the East Harlem speakers and La Celestina, a 15th century Spanish picaresque novel.

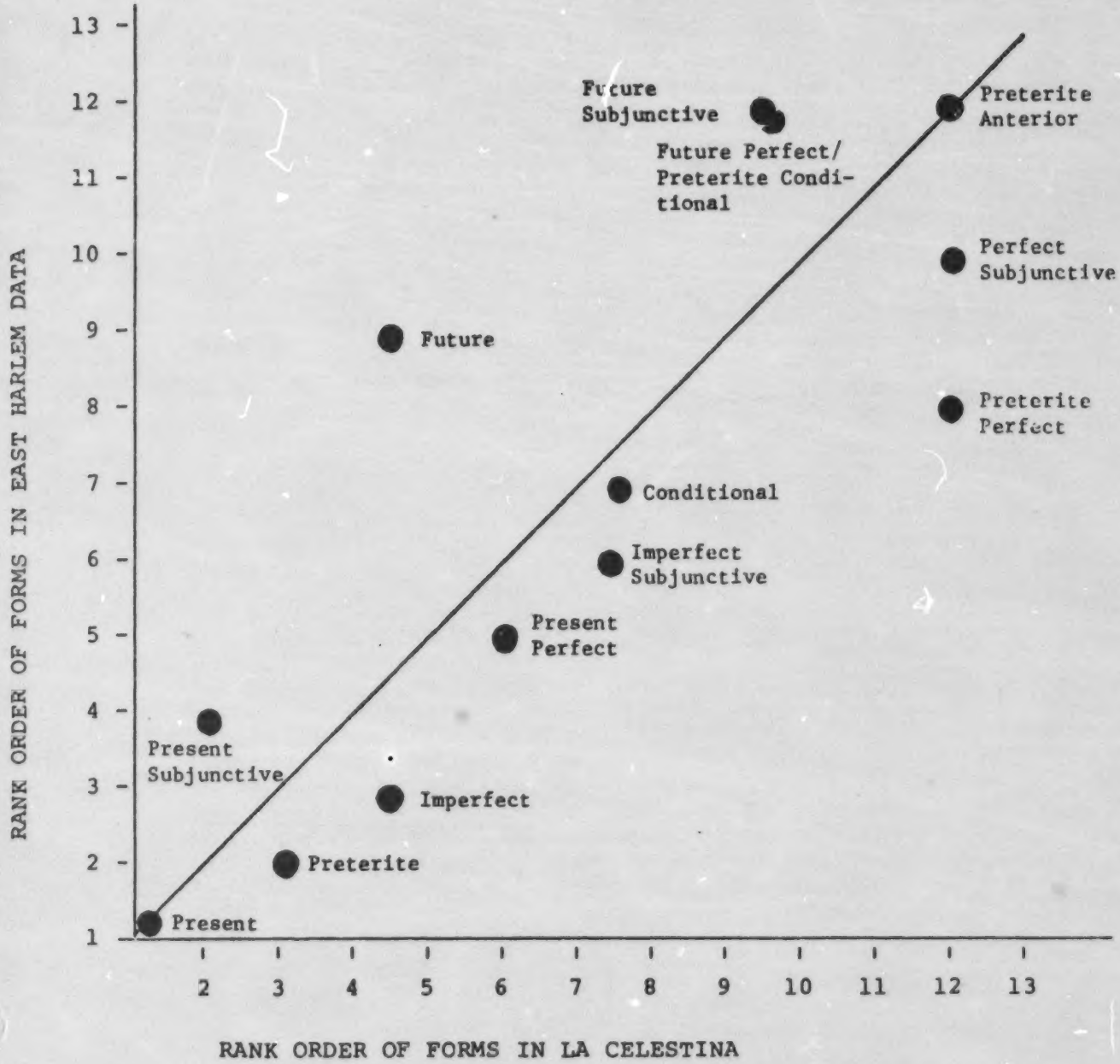

Figure 3. Rank order of inflected verb form frequencies in East Harlem data versus order in La Celestina.

Points lying near the diagonal represent forms of relatively equal importance in each corpus. Strikingly enough, Figure 3 shows that the relative ranking of verb form usage has remained basically unchanged since the 15th century.

The only real exception is in use of the inflected future, which had much greater importance in the 15th century than today. Indeed, this form has practically been replaced by the periphrastic future in vernacular Puerto Rican Spanish. As may be seen in (7), the rank correlation of these figures is .85, indicating a strong similarity in the distribution of verb forms.

7. Rank correlations of verb form usage.

East Harlem - 15th century Spanish	.85
East Harlem - modern Andalusian Spanish	.79
East Harlem - English	.53
Andalusian - English	.57

When compared with a corpus of English verb forms, in contrast, we find that their distribution is significantly different for every verb form but one; that is, influence from English does not appear to have affected these core areas of the Spanish language. The correlations in (7) summarize this lack of influence.

Indeed, in our study of East Harlem, the only factor which was found to differentiate verb usage in any significant way was the speech situation in which the form was uttered. Different speech situations were shown to favor different proportions of verbal forms, providing yet another example of the inherent stylistic variation which characterizes natural languages.

Thus we see that the only significant change in the system, decrease in use of the inflected future, is intra-systemic: it is the result of the extension of the present periphrastic and simple present forms to convey futurity. This process is widespread in other Romance languages as well as in English.

The example given in (6a), Yo no estoy viendo eso, is one of only three in the entire corpus. The evidence thus is against convergence with English. Such conclusions were not drawn from qualitative studies of verb usage in other varieties of United States Spanish (see Floyd 1978, Bills 1975). However, those studies have concentrated on supposed deviations from the standard, without quantitative study of the standard itself. This study shows that when apparent deviations are placed within the context of the entire system, they are seen to constitute only a minuscule portion of the total verbal output. This leads us to suggest that emphasis on deviations in multilingual situations on the part of researchers, educators and intellectuals, is merely stereotyping due to the phenomenon of categorical perception, whereby deviation from a norm may be seen as far more prominent than its negligible frequency would warrant.

These studies raise serious questions about the theory of language convergence in contact situations. It is clear that the Puerto Rican Spanish spoken in El Barrio has been influenced by English, but this influence is most evident in loan words, calques and lexical borrowings.

However, the grammar of Spanish, which has been shown by the ethnographic and attitudinal studies to serve a wide range of communicative functions, has been extraordinarily resistant to influence from the grammar of English; this despite the economic and political dominance of the English-speaking community.

The evidence of Gumperz and Wilson (1971) for the convergence of Urdu, Marathi and Kannada, in Kupwar, India, must be due to a greater time scale, or to very different historical and cultural contexts, perhaps reflecting a restricted functioning of one or more of the codes involved, which as has been shown in preceding sections, is not the case here. Other cases of putative language convergence may simply reflect an uninformed purism, or non-quantitative methodology, or a preoccupation with borrowing of non-core vocabulary. More dangerous than the linguistic outcomes of contact to a vigorous and thriving Spanish, at least in this instance, are those who would restrict its usage from schools, government and other institutions, and purists who stigmatize the expanded expressive repertoire of bilingual speakers in a linguistically complex milieu.

6.0 Discussion

To return to the question of the linguistic correlates of social change, especially in culture contact situations, we have to conclude that in the Puerto Rican case the same processes that instigate change also have a stabilizing influence. That transformations have taken place is indisputable, but whether or not these can be described as assimilation or loss is another question. This is due to processes within the community that counteract the more obvious ones that are visible in any unequal power relationship.

Simplified views of the language 'problem' of Puerto Ricans in regard to language change and its social meaning are frequently expounded by politicians, educators and opinion-molders in the mass media. Two which commonly recur concern 1) the purported 'alinguality' or 'semi-linguality' of Puerto Ricans, and 2) their 'americanization.'

The supposed lack of any language is a claim aimed especially at Puerto Ricans in the United States by intellectuals of many persuasions who view the destruction of language as the culmination of the colonial domination which has battered all aspects of what is distinctively Puerto Rican (de Granda 1972, Silén 1971, Maldonado-Denis 1976). The statistics of poor educational achievement, as well as low prestige attached to working class varieties of speech (both of which are as much an effect as a cause of social devaluation), are also advanced as evidence of lack of language. But the evidence considered most indicative of this lack is the inability of a substantial number of minority children to pass standardized tests.[12] In effect, such judgements blame the victims for social

prejudices levelled against them. There is no doubt that educational achievement is a serious issue,[13] but the claim that Puerto Ricans are without either language is quite different and is repeatedly discredited by our results. The observed use of Spanish and English in many functions and styles, the opinions that Puerto Ricans speak 'good' Spanish, the attitudes regarding Spanish maintenance and the expectations that bilingual education will provide bilingual abilities, as well as the results of the linguistic analyses, together suggest that the languages are intact and that bilingualism is at present an accomplished fact and a viable objective for the community to pursue.

Those who view English as an instrument of 'americanization,' whether they prescribe or oppose it, are prisoners of a static view of the subordinate culture (as often happens in culture contact interpretation (Schneider 1975, O'Laughlin 1975)). English is seen alternatively as the solution to the 'developmental problems of a backward people'--that is, as a key piece of technology needed to attain the dream of modern life--or, on the other hand, as a threat to Puerto Rican culture and identity which is quintessentially bound up with things Hispanic. In both cases, language is viewed as a monolingual choice: If English, then not Spanish. The converse of this view is expressed in the belief that the Spanish language is a rallying point in the struggle for autonomy and implies cultural resistance.[14] Voices from the mass media condemn bilingualism, generating a perception of 'danger' related to policy that recognizes and provides a means to cultivate non-English languages in the United States.

In response to these prevailing misconceptions about language with regard to Puerto Ricans in the United States, we review several findings from our study in El Barrio. The situation of being without a language is contradicted rather than proved by bilingual mixing, since in such mixing the two languages conjoin in ways which preserve grammaticality; moreover, the persons who switch at more syntactic boundaries were shown to be the balanced bilinguals. Code-switching is acknowledged and recognized as a form of communication in the interviews, and most importantly, its role as a norm or strategy of interaction was observed in many settings.

The several approaches of our study reveal that the language choice is both Spanish and English, rather than one or the other. Both languages are desired and used, each with its structural integrity, especially in spoken interaction. Clearly, numerous loan words appear even in the speech of monolinguals, but these vocabulary items are only superficial indicators of linguistic assimilation, and it is largely on the basis of these that popularized accounts illustrate linguistic 'defects' (Narvaez 1976, Palma 1979). Also out of proportion is the claim that Puerto Ricans speak neither language well. Despite judgements to the contrary, often based on anecdotal evidence of deviations from a 'norm', our findings show the overwhelming majority of utterances to be as grammatical as the standard. Both the criteria of standard language and the social connotation of 'mistakes' should be questioned (e.g. Pérez Sala 1972, Labov 1972) in response to claims of being without language.

The aspects of 'americanization' and resistance are not only

linguistic, but cultural, thus wider than the scope of this treatment (see Centro de Estudios Puertorriqueños, forthcoming). English, far from being an indicator of assimilation, is seen by many as necessary for economic success (instrumentally useful) but not antithetical to Puerto Rican culture. Spanish, while viewed as important to being Puerto Rican, can also be seen as a way of being American (Appendix item 13, J-M).

Although our sociolinguistic research provides no evidence of assimilation of Spanish linguistic structures, there is some indication that the place of Spanish within the linguistic ecology, i.e. its relation to the social environment,[15] has been transformed. In other words, the performance of the community members is undergoing change--but the direction is not entirely a shift toward English. A major transformation, as outlined in the sociolinguistic cycle of the community (cf. section 4.4 above), is that the relative proficiency of speakers is increasingly greater in English, although at this stage the community remains bilingual. The migration process, which renews the Puerto Rican basis of the community from Puerto Rico and reconstitutes the colonial relationship, also conditions the maintenance of Spanish skills. This tends to favor the use of Spanish, even among persons born in the United States. These factors lead to competing tendencies within the bilingual nature of the community, and are only examples of the various forces exerting pressure on the sociolinguistic system at present.

The dialectical mechanisms, social and linguistic, in the contact

situation may aid us in explaining (and acting upon) the outcomes of the contact of languages. In this perspective, the studies which show that Spanish (as an abstract system, or langue) is retaining its integrity and not changing due to English influence are remarkable in their findings, but these findings should not inspire complacency.[16]

Within a theory of sociolinguistic ecology, then, it seems necessary that research done by and primarily for the Puerto Rican community should illuminate the present linguistic situation and the possibilities of future transmission of language abilities, as based on observed facts and attested attitudes. Assuming advocacy as the necessary follow-through of research, Puerto Ricans in general, and various sectors of the community in particular (educators, parents, youth, political spokespersons) should be addressed regarding their own and others' views of language and its import. If community opinion differs from objective facts, or from public opinion in general, then research findings are needed to dispel misconceptions and inform strategies for change. Campaigns for bilingual education seem an appropriate example here. The willingness and resources of the community should not be underestimated, the condemnation of purists should be refuted and the need for developed literate skills in both languages should be advocated. The issues of community support, the demographics of bilingualism and the effects of linguistic change on the culture, are societal issues that work upon and through language. Thus a social view of linguistics which investigates language as an integral part of a social system is necessary.

That the two languages are integral and that nearly everyone is somewhat bilingual, therefore, do not suffice as resolutions to language issues. The kind of skills that not all speakers control, including standard forms of English and literacy for Spanish, are the linguistic keys to understanding social control. On the other hand, the grammaticality and functioning of Spanish and English communication are keys to explaining the resources and resistance to assimilation that continue against the severest odds. For example, even though the Presidential Commission on Foreign Language Instruction (1979) has concluded that the state of foreign language learning in the United States is dismally short of national needs, no mention is made of foreign language resources among minority language populations within United States society. In effect, the recommendations parallel the pedagogical practices of bilingual education (which for reasons of political expediency is never mentioned). Bilingual education, even when it is only transitional, encounters resistance as another concession to minorities, or as inflationary government spending. If the schools fail to develop Spanish resources into literate skills, and are unable as well to provide standard English skills, then the net effect is no outlet through social mobility.

If sociolinguistics is to treat the dynamics of language within a social scientific framework, future studies of this type will be crucial. The combination of quantitative and qualitative methods integrates knowledge of structure with that of process, enabling the connection of

language to factors that determine the Puerto Rican social situation. Static and one-sided views of the linguistic system needed to be overcome by a critical perspective on the social forces which impinge on language in the entire cultural system.

Notes

[1] The results reported in this paper are part of an interdisciplinary study of language use in East Harlem, New York, carried out by the Language Policy Task Force: Pedro Pedraza, John Attinasi, Shana Poplack and Alicia Pousada. We gratefully acknowledge the support of the Ford Foundation, the National Institute of Education, and the City University of New York for this project. The initial version of this paper was presented at the New York Academy of Sciences on February 4, 1980. The critical comments of our colleagues at the Center for Puerto Rican Studies, and in particular, Frank Bonilla, Camille Rodríguez and José Sánchez, were crucial to the present formulation of this work. Our thanks to Migdalia Rodríguez and Carmen De La Torre for their expert preparation of the text.

[2] Older men from Puerto Rico are adept at a formal, deliberate and florid style used for argumentation. It appears to be characterized by less common tense forms and a greater proportion of usted, the formal pronoun of address.

[3] Calquing is a common type of borrowing involving the reproduction of L_2 morphemes using native language material. An example in vernacular Puerto Rican Spanish might be the expression está supuesto, based on English he's supposed to.

[4] This characterization was made on the basis of observed frequency of usage combined with self-report of the language that 'feels most comfortable' and is used more frequently in a series of domains. We shall see that the resulting assessment generally corresponds to the linguistic assessment of language capability.

[5] Of course, influence from English may be expected to be most apparent in the speech of those who are 'English-dominant'. These speakers were not included in the present sample because they simply did not produce enough Spanish to compare quantitatively with the others. Two possible outcomes of the contact situation may be hypothesized for their Spanish: (1) such Spanish as they do speak may undergo restructuring so as to approximate English structures; that is, it may converge with English, (2) the Spanish language in toto may gradually disappear from the repertoire of these speakers, and be retained only for emblematic purposes (e.g. through insertion of Spanish words or idiomatic expressions into English), in which case the grammar of the language would remain unaffected. Our ethnographic observations of language use in this community may be interpreted in favor of the second possibility, but we have no linguistic evidence with which to substantiate either hypothesis at the moment.

[6] Numbers in parentheses are speaker identification codes.

[7] 'S' and 'N' refer to any phonetic realization of the variables (s) and (n) respectively, other than phonetic zero.

[8] Note that this behavior holds when the subject noun phrase precedes the verb, the canonical sentence structure in Spanish, but not when it follows. There is no significant difference in verbal deletion rates between inflected and uninflected noun phrases when these are postposed.

[9] Of course, standard English is not the only influence on Puerto Rican speech. It has been observed in this community (Pedraza ms.) and shown in others (Wolfram 1974, Poplack 1978a), that Black English may also influence Puerto Rican speech. The concord rule in Black English is also variable, largely due to -s deletion and hypercorrect -s reinsertion on both nouns and verbs. However, the outcomes of these processes are not directly comparable. Black English hypercorrect -s insertion does not necessarily function as a plural marker, but rather results in neutralization to third person singular on verbs, and neutralization of the singluar/plural distinctions in nouns. The only attested instances of hypercorrect -s insertion in Puerto Rican Spanish verbs, which may be considered analogous to Black English -s insertion, serve, in contrast, to reinforce rather than neutralize the singular/plural distinction.

[10] The general validity of these constraints has been observed independently in the literature by e.g. Jacobson (1976), Lipski (1978) and Pfaff (1979). However, none of these scholars have specifically incorporated them into their analyses.

[11] The figures in Table 4 refer to the propensity of a given syntactic boundary to be the site of a switch and should not be interpreted as the actual proportion of switches at that boundary.

[12] It is widely known that the measurement of language-related competencies has been seriously questioned (e.g. Nader 1979, Kamin 1973). Moreover, the relation between achievement on standardized tests and a successful educational experience is also uncertain, given the more immediate problems of educational practice in the United States, such as lack of commitment on the part of teachers, dim prospects for minority educational attainment and budget cuts (Macchiarola 1979, de Leon 1979, Newfield 1980).

[13] A frequent view expressed by members and observers of the Puerto Rican community is that 'education is the answer'. Language is bound up with this 'answer' insofar as a willingness to learn English is concerned: command of literate and standard forms would enhance mobility, and facilitate the acquisition of specialized skills needed in a competitive job market. Ideally, the logic seems valid. But language and education are only two factors in obtaining employment, particularly when the job market is contracting, and more so where minority groups are concerned. The link between education and employment is clearly more complex than a 1:1 relationship would imply: choosing English does not necessarily imply educational attainment, and having an education does not automatically lead to economic mobility.

[14] Some Puerto Ricans tend to stereotype or romanticize the monolingual Spanish-speaker, thinking such a person is either backward and economically obsolete ("the jíbaro is a hick"), or on the other hand, that he is a political resource, consciously or latently resistant to American domination.

[15] Even in this early formulation (Haugen 1970), linguistic ecology was considered to encompass the classification of languages within a given environment, the users, domains of use, kinds and extent of bilingualism, internal variation, written tradition standardization and institutional support for the languages and varieties, and finally attitudes towards the language and its users. More recent formulations (Hymes 1973, Rossi-Landi 1975, Penalosa ms., Macias ms., Yartseva 1977, Williams 1977) view the linguistic system as constituted by and responsive to stresses within the system, arising from economic, ideological, demographic and other extra-linguistic sources.

[16] In particular these findings should not be taken as predictors for either maintenance or loss of Spanish. Evidence of these would come from studying the number of users of each language, the amount of each language they speak, and expansion versus reduction of the linguistic repertoire (including the genres and registers of each).

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APPENDIX

1.

	ADOL 12-18	Y-ADUL 19-30	M-ADUL 31-50	OLDER 50+	ROW SUMS	KEY
BLOCK	23	33	25	10	91	RAW
	25.275	36.264	27.473	10.989	100.000	RPR
EDUCTR		20	19	1	40	RAW
		50.000	47.500	2.500	100.000	RPR
COLUMN SUMS	23	53	44	11	131	RAW
	17.557	40.458	33.588	8.397	100.000	RPR

Table 1. AGE BY SAMPLE

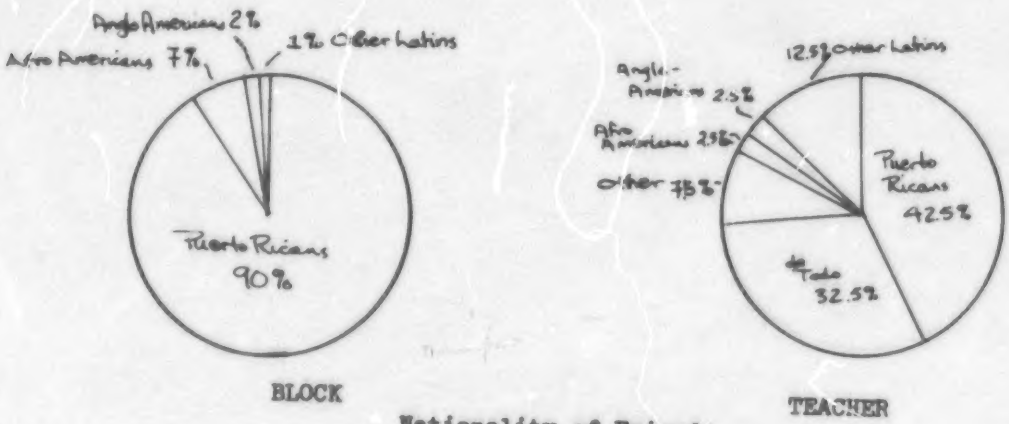
2.

TABLE 2 AGE GROUPS BY AGE OF ARRIVAL

	Age 19 - 30 Block		Teacher		Age 31 - 50* Block		Teacher	
U.S. Born	12	36%	8	40%	4	17%	7	35%
Arrival at 0-5	10	30%	9	45%	5	22%	5	25%
Arrival at 6-12	5	15%	2	10%	4	14%	3	15%
Arrival after 13	6	18%	1	5%	9	38%	5	25%*
	33		20		23		20	

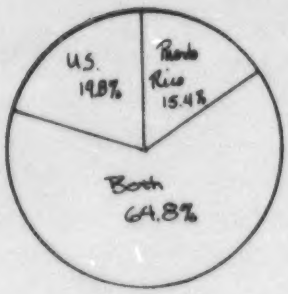
* Includes 1 school principal over 50 years of age.

3.



Nationality of Friends

4.



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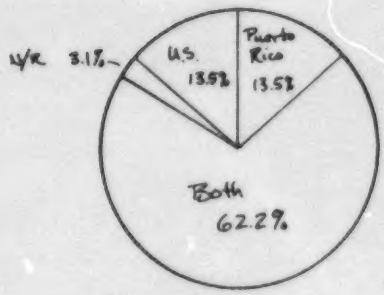
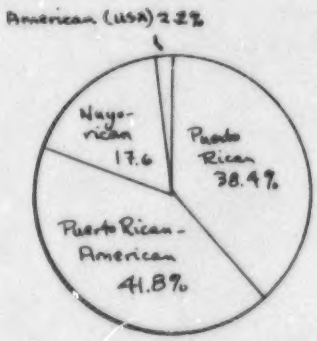


TEACHER

What do you consider yourself part of?

5.

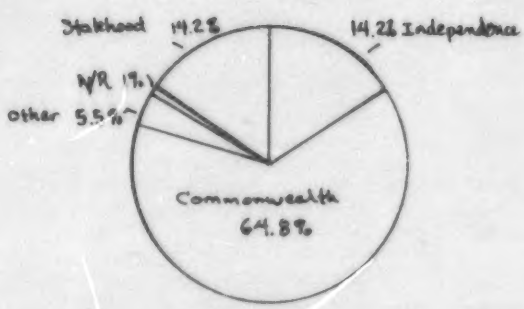


BLOCK

TEACHER

What is your nationality?

6.



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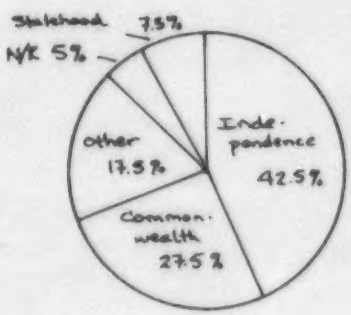
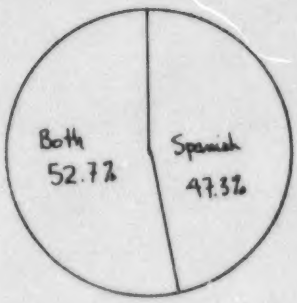


TEACHER

What political status do you favor for Puerto Rico?

7.



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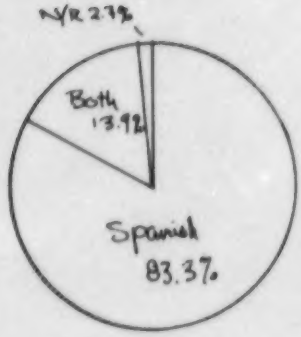
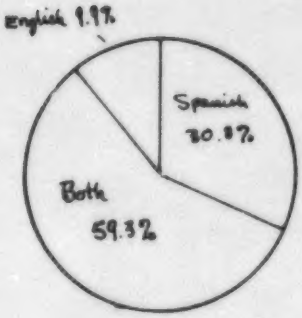


TEACHER

Favored official language for Puerto Rico

8.



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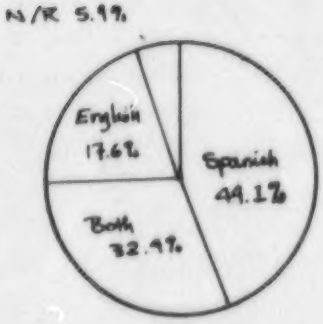
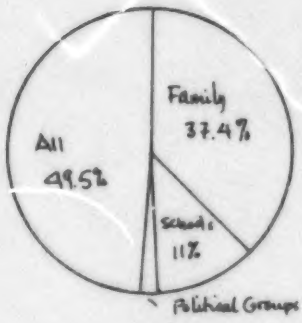


TEACHER

Preferred first language for child

9.



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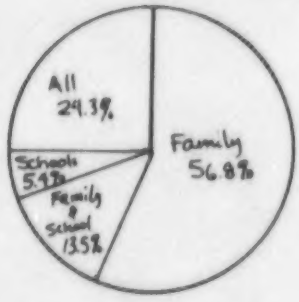
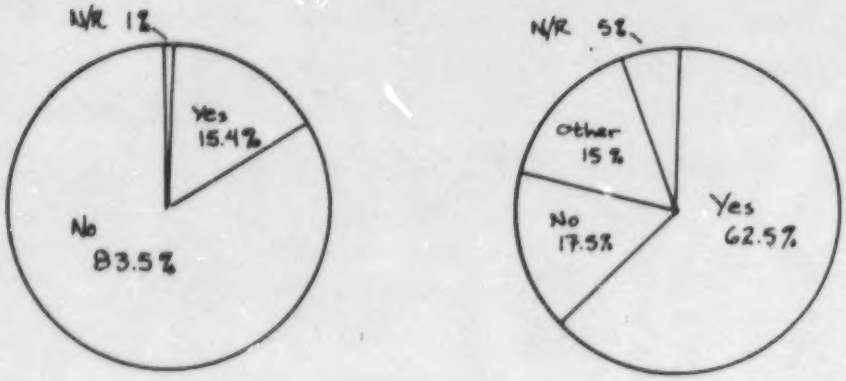


TEACHER

Who is responsible for maintenance of Spanish?

10.



BLOCK TEACHER

Is Spanish necessary to our cultural identity as Puerto Ricans?

11.

BLOCK TEACHER

Dominant language by self report

12.

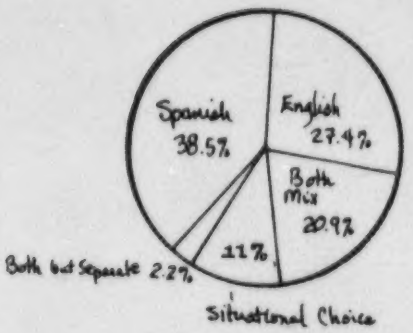
BLOCK TEACHER

Habitual language of literacy

13.

			Block	Teacher
A	Should Spanish be maintained in Puerto Rico?	Yes:	96.7%	95%
B	Why? Because it relates to the national culture:		53.8%	53.8%
	Because it is the national language:		33%	20.5%
C	Should Spanish be maintained in the New York Puerto Rican Community?	Yes:	100%	94.6%
D	Should Bilingual Education be used to maintain Spanish?	Yes:	100%	94.6%
E	Do you want your children to speak Spanish?	Yes:	100%	100%
F	Do you want your children to learn Puerto Rican Culture?	Yes:	96.7%	94.4%
G	Are you and favor of both Spanish and English as languages of Instruction?	Yes:	98.9%	91.7%
H	Do you think the basic skills for survival in this Society are available in the bilingual education program?	Yes:	81.3%	86.5%
I	Do you favor bilingual education in non-Puerto Rican communities?	Yes:	98.9%	91.9%
J	On a scale of 1 to 7, is Spanish important to be part of Puerto Rican culture?	5-6-7:	87.4%	80%
K	Is English important to be part of American culture?	5-6-7:	87.4%	77.5%
L	Can you speak Spanish and be part of American culture?	Yes:	94.5%	94.4%
M	Can you speak English and be part of Puerto Rican Culture?	Yes:	100%	100%

14.



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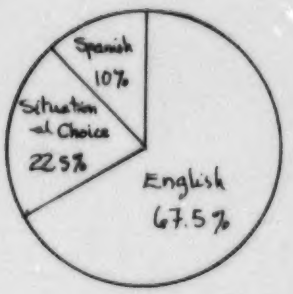
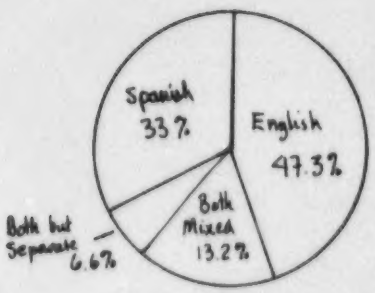


TEACHER

Language spoken to Puerto Ricans

15.



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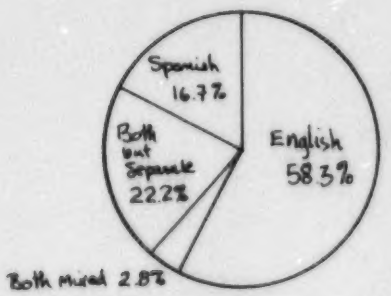
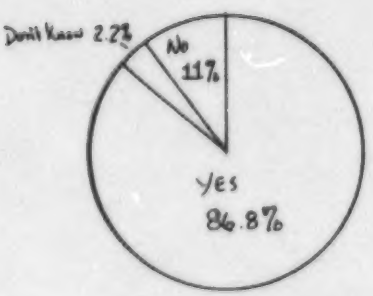


TEACHER

Most comfortable language

15a.



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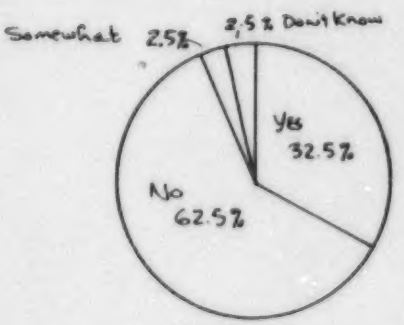
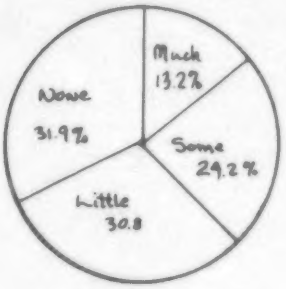


TEACHER

Do Puerto Ricans have a new language?

16. REPORTED USE OF THE MEDIA



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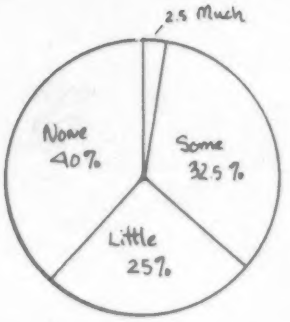
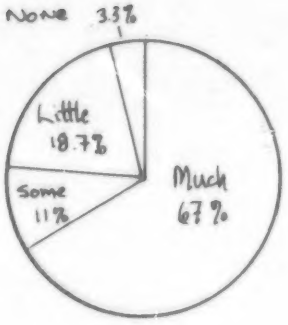


TEACHER

SPANISH TV



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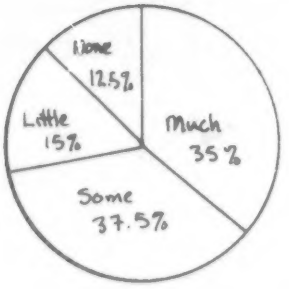
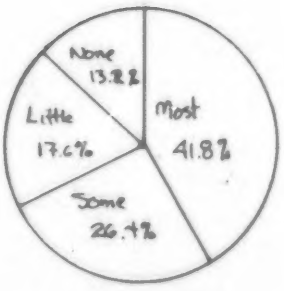


TEACHER

ENGLISH TV



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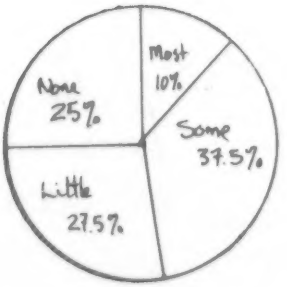
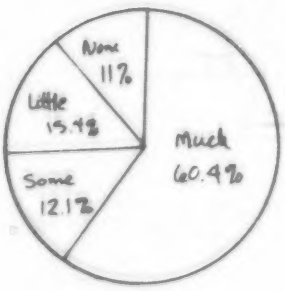


TEACHER

SPANISH RADIO



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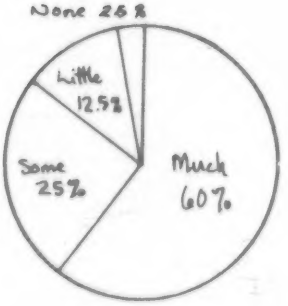
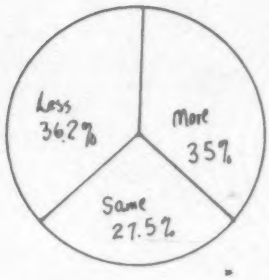


TEACHER

ENGLISH RADIO

17.



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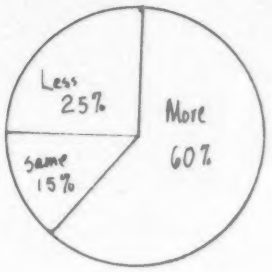
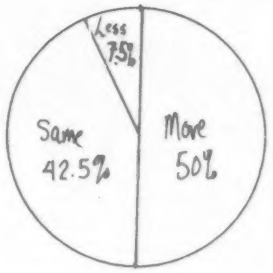


Teacher

Reported Change in Use of Spanish

Block



Teacher

Reported Change in Use of English

18.

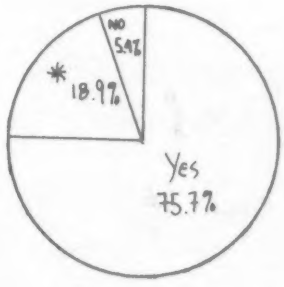
BLOCK

* rejects question

TEACHER

Do you speak 'good' Spanish?

BLOCK



* rejects question

TEACHER

Do you speak 'good' English?